UNITED STATES PATENT AND TRADEMARK OFFICE

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09/263,805	03/08/1999	YOSHIHIKO HIROTA	49733-016	2255

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Paper No. 23

Application Number: 09/263,805
Filing Date: March 08, 1999
Appellant(s): HIROTA ET AL.

MAILED

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Technology Center 2600

Edward Wise
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed on February 9, 2004, and supplemental brief

filed on February 25, 2004

(1)   Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2)   Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly

affect or be directly affected by or have a bearing on the decision in the pending appeal

is contained in the brief.

(3)   Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4)   Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection

contained in the brief is correct.

(5)   Summary of Invention

The summary of invention contained in the brief is correct.

(6)   Issues

The appellant's statement of the issues in the brief is correct.

(7)   Grouping of Claims

Claims 1-2, 15, 22-23, 29-30, 52-53, and 56 stand or fall together.

(8)   Claims Appealed

The copy of the appealed claims contained in the Appendix of Claims to the brief is

correct.

(9)   Prior Art of Record

US 5,287,204   Koizumi et al.   02-1995

US 5,748,801   Goto   05-1998

(10) *Grounds of Rejection*

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-2, 15, 22-23, 29-30, 52-53, and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5287204 to Koizumi et al. (a reference of the record) in view of US 5748801 to Goto.

As to claim 1, Koizumi discloses an image processing apparatus including:

A brightness (L*) data extracting section for extracting brightness data from image information of each pixel (fig. 3 element 16b, note that converting color data to L* data);

first determining means (fig.6a, elements 434) for determining a color pixel by using a reference value (a threshold)(col. 8 lines 4-48);

means for dividing the image into a predetermined number blocks in an image processing method (Figs. 13c and 13d, col. 11, lines 32-60).

counting means for counting the number of color pixels for each block (fig. 8, element 443); and

second determining means for discriminating an color image based on the counting results by counting means (fig. 8, element 445, col. 8 line 57-col. 10 line 23).

Koizumi uses a predetermined L* threshold (Fig. 6a, 433a) to determine the color pixel but does not explicitly mention the threshold is determined based on the extracted brightness, which is well known in the art.

Goto, in an analogous environment, discloses the step of extracting the brightness and setting the threshold of color pixel based on the brightness (fig. 2-4, col. 4 line 15-col. 5 line 54)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the scheme of Goto in the apparatus of Koizumi in order to accurately and quickly determine the color image or monochromatic image. Doing so would increase the efficiency of the apparatus.

As to claim 56, the claim is a corresponding method claim to claim 1. The discussion is addressed with regard to claim 1.

As to claim 2, Koizumi further discloses third determination means for determining color block (fig. 1, element 4).

As to claim 52, all limitations are discussed with regard to claim 1 except printing means. Koizumi further discloses the printing means for printing color or monochrome output (fig. 2, element 34, col. 4 line 29-col. 5 line 32, col. 10 lines 24-60).

As to claim 15, Koizumi further discloses the block is color block when the number of color pixels exceeds a threshold (col. 8 line 57-col. 9 line 46).

As to claims 22 and 23, Koizumi further discloses the determining means for determining an image as color image when number of color blocks exceeds a threshold (col. 9 line 47-col. 10 line 23).

As to claim 29, Koizumi further discloses excluding or correcting (not counting) a monochromatic block in certain portion of image from the determination (col. 9, lines 3-26).

As to claim 30, Koizumi further discloses the portion includes peripheral portion of the image (col. 10 lines 7-23).

As to claim 53, Koizumi further discloses a scanner (fig. 2 element 40, col. 4 lines 50)

Allowable Subject Matter

Claims 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

(11) Response to Argument

(A) The following discussion relates to the rejection of claims 1-3, 23-24, 27, 30-31, and 39 are rejected under 35 U.S.C. 103 (a) as unpatentable over US 5287204 to Koizumi et al. in view of US 5748801 to Goto.

1. Appellants' argument---- Appellant alleged that "in Goto, a threshold value is set by an operator with *a mouse 6*....It is described that an operator can set an optimum threshold value with the mouse 6 observing an image that changes on a display. That is, an operator can set for an image on the display is appropriate in real

time. Accordingly, Goto does **NOT** disclose "*determination means for determining a threshold value based on a value of brightness data*"." (Page 7, paragraph 2-3).

Examiner's response ---- The Examiner respectfully disagrees with Appellant. First, from the quoted and highlighted claim language (note that exact claim language should be a reference value instead of a threshold value), there is no limitation literally about how to determine the threshold as long as the determination is based on a value of brightness data, which is exactly and expressly disclosed by Goto (col. 4 lines 15-43). Second, Goto is cited to show that a threshold determined by based on brightness data is well known. In addition, Koizumi has taught using a predetermined rightness threshold (fig. 6a, 433a). Furthermore, even if considering the claim language were means plus function claim, the specification and drawings of the instant case show that the invention use similar means to adjust (determine) the threshold (see, Fig. 2, 16 and 18 are the means to determine the optimal threshold as described in page 25 of the specification "... image processing apparatus 205 is provided with a threshold adjusting unit 16 for providing various determination thresholds to the color determination unit 14.... The threshold adjusting unit 16 is connected to an operation and display panel 18."). Moreover, "...various thresholds used for the color determination unit 14 can be adjusted by an operator's operation." (page 28 of the specification, lines 7-9) and the settings are also similar to that of Goto, which uses buttons to set the threshold (see Fig. 5, page 28-29 of specification). Therefore, Goto clearly discloses the limitations of claimed language.

2. <u>Appellants' argument</u>---- Appellant further argued that "Koizumi specifically claims ...(see claim1). There is no disclosure or suggestion about using extracted brightness data for determining a reference value for judging a pixel color of each pixel. ... even if it were presumed that Goto discloses extracting the brightness and setting the threshold of color pixel based on the brightness, if Koizumi were modified to use this **presumed**) teaching of Goto, it would alter the invention that is claimed in Goto, with is not permitted." (page 7, last paragraph -page 8 paragraph 1).

<u>Examiner's response</u> ---- The Examiner respectfully disagrees with Appellant. First, Appellant misinterprets the law and regulation. MPEP § 2143.01 does not express or imply that the prior art must be confined by the claim language but only expressly mentions the principle operation should not be changed. "[T] he scope of the prior art has been defined as that 'reasonably pertinent to the particular problem with which the inventor was involved'." Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530 (Fed. Cir. 1983). Here, Koizumi teaches similar image processing method with that of the invention, particularly pertinent to the judging between monochromic and color images which the inventor was tried to deal with. Only difference between Koizumi and the instant case is that Koizumi's threshold is predetermined and set in the register 433a (Koizumi did not mention how to set the threshold) and in the instant case, the threshold can be set (by operator) based on the brightness data. How to determine a threshold clearly does not change the principle operation, which is determining whether a pixel or a block of pixels is monochromic, or color because a threshold is a numerical value, which is changed only in values. In addition, Appellant's argument is logically

incorrect and confusing because what Koizumi is modified to use Goto's threshold

setting method instead uses predetermined threshold has nothing to do with "alter the

invention that is claimed in Goto, which is not permitted." Actually no matter how Goto

claims related to the threshold, as long as Goto teaches "determining a reference value

based on the brightness data" and in an analogous art, the Examiner can modify

Koizumi to incorporate Goto's scheme to render the combination of the prior arts

obvious to one having ordinary skill in the art at the time the invention was made.

Therefore, Appellant's argument is baseless and incorrect because of logic

fallacy.

3. Appellants' argument---- Appellant still argues that there is no motivation or

suggestion in any of the prior arts to arrive at the claimed inventions except finding in

Appellants' disclosure. Thus, the Examiner did not establish a prime facie basis to deny

patentability to the claimed invention. (page 8, paragraph 2-3).

Examiner's response --- The Examiner does not agree with Appellant.

Regarding to the argument of motivation to combine Koizumi and Goto, the

Examiner recognizes that obviousness can only be established by combining or

modifying the teachings of the prior art to produce the claimed invention where there is

some teaching, suggestion, or motivation to do so found either in the references

themselves or in the knowledge generally available to one of ordinary skill in the art.

See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and In re Jones, 958

F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In the instant case, first, Koizumi and

Goto are in the image processing field, specifically in color image processing. Koizumi

clearly discloses a method and an apparatus for Judging monochromic and color images (see title and abstract). Although Koizumi does not teach that determining a reference value based on the brightness data, such processing technique is taught by Goto (col. 4 lines 15-43). Moreover, Goto uses the technique to improve the image quality (Goto, col. 2 lines 26-45) and efficiency of image processing (Goto, col. 1 lines 20-54 and col. 3 lines 25-32). Goto is cited, for sake of argument, to show that the scheme of determining a reference value based on the brightness data is well known in the art. Finally, since the knowledge or suggestion to modify the teachings of the prior arts to produce the claimed invention are all contained in both Koizumi and Goto, it has apparently taken in to account only knowledge from the patents themselves. The obviousness to combine the references is properly established. Also, according to the extensive discussion above related to the differences of Koizumi and Goto, there are no change of the principle operation by combining the prior arts.

Therefore, such reconstruction is proper and *prima facie* case of obviousness has been established.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted
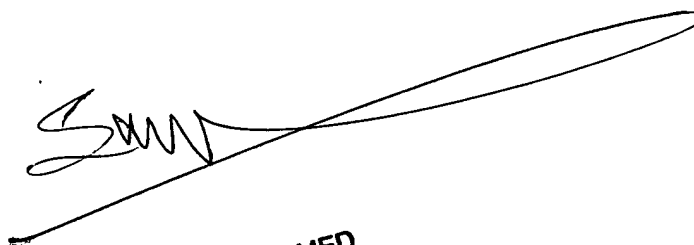
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Primary Examiner

May 11, 2004

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